
✿ Cobra Probes Containing Replaceable Thermocouples

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A modification of the basic design of cobra probes provides for relatively easy replacement of broken thermocouples. [Cobra probes are standard tube-type pressure probes that may also contain thermocouples and that are routinely used in wind tunnels and aeronautical hardware. They are so named because in side views, they resemble a cobra poised

to attack.] Heretofore, there has been no easy way to replace a broken thermocouple in a cobra probe: instead, it has been necessary to break the probe apart and then rebuild it, typically at a cost between \$2,000 and \$4,000 (2004 prices). The modified design makes it possible to replace the thermocouple, in minimal time and at relatively low cost, by insert-

ing new thermocouple wire in a tube.

This work was done by John Jones and Adam Redding of Glenn Research Center.

Inquiries concerning rights for the commercial use of this invention should be addressed to NASA Glenn Research Center, Innovative Partnerships Office, Attn: Steve Fedor, Mail Stop 4-8, 21000 Brookpark Road, Cleveland, Ohio 44135. Refer to LEW-17832-1.